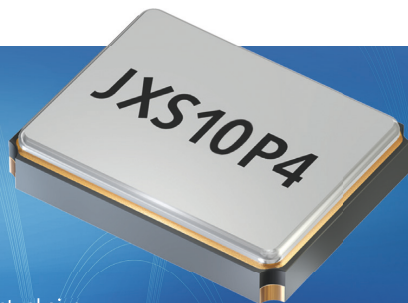




actual size

Automotive SMD Crystal · JXS10P4

- 4 Pad Version, 1.2 x 1.0 mm
- seam sealed ceramic / metal package
- all versions are AEC-Q200 qualified
- HMR version with extended shock & vibration immunity
- metal lid allows EMI shielding



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

GENERAL DATA

TYPE	JXS10P4
frequency range	32.0 / 37.40 / 48.0 MHz (fund. AT-cut)
frequency tolerance at 25 °C	± 10 ppm / ± 20 ppm / ± 30 ppm
load capacitance C_L	8 pF standard (option: 6 pF / 7 pF / 9 pF / 10 pF)
shunt capacitance C_0	< 2 pF
storage temperature	-40 °C ~ +125 °C
drive level max.	100 µW (10 µW recommended)
aging	< ± 3 ppm first year (option: < ± 2 ppm first year for tol. ± 10 ppm)

TABLE 1: FREQUENCY STABILITY VS. TEMPERATURE

		± 15 ppm	± 20 ppm	± 25 ppm	± 30 ppm	± 50 ppm	± 100 ppm
-40°C ~ +85°C	T1	Δ	○	○	○	○	○
-40°C ~ +105 °C	T2			Δ	○	○	○
-40°C ~ +125 °C	T3					Δ	○

○ available Δ case-by-case, ask if available

ESR (SERIES RESISTANCE R_S)

frequency in MHz	vibration mode	ESR max. in Ω	ESR typ. in Ω
32.0	fund. AT	100	50
37.40	fund. AT	60	30
48.0	fund. AT	60	30

more frequencies case-by-case, ask for availability

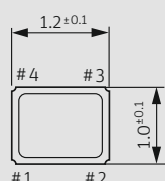
MARKING

frequency with load capacitance code
company code / date code

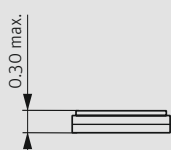
date code: year/month; A ~ M: Jan. - Dec.; example: 5A = 2025 January
5: 2025 6: 2026 7: 2027 8: 2028 9: 2029 0: 2030

Jan.	Febr.	Mar.	Apr.	May	June
A	B	C		E	F
July	Aug.	Sept.	Oct.	Nov.	Dec.
G	H	J	K	L	M

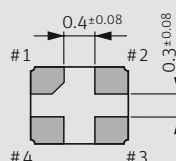
DIMENSIONS



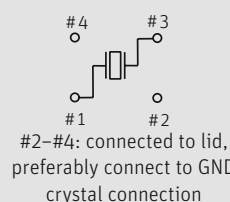
top view



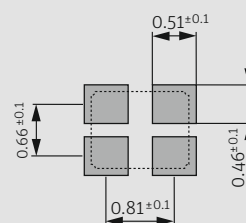
side view



bottom view



crystal connection



pad layout

in mm

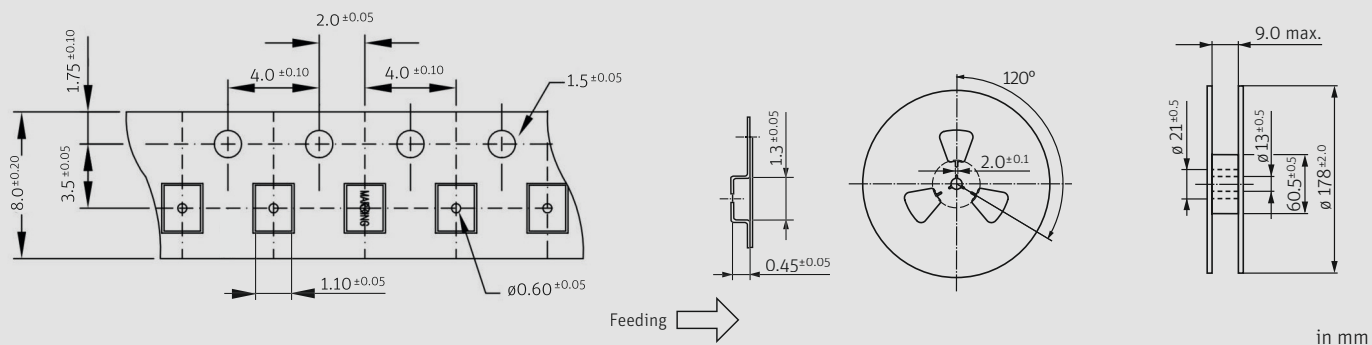
ORDER INFORMATION

Q	frequency	type	load capacitance	tolerance at 25 °C	stability vs. temp. range	option 1	option 2
Quartz	32.0 MHz 37.40 MHz 48.0 MHz	JXS10P4	8 pF standard 6 pF ~ 10 pF available	10 = ± 10 ppm 20 = ± 20 ppm 30 = ± 30 ppm	see table 1	T1 = -40 °C ~ + 85 °C T2 = -40 °C ~ +105 °C T3 = -40 °C ~ +125 °C	AEC = AEC-Q200 qualified HMR = high mechanical reliability (3000g/half sine wave/0.3ms) FU = for fundamental frequencies ≥ 20 MHz

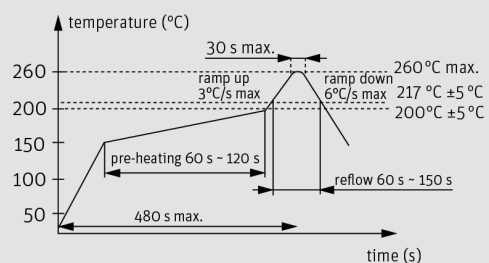
Example: Q 37.40-JXS10P4-8-30/50-T2-FU-AEC-LF (Suffix LF = RoHS compliant / Pb free)

Automotive SMD Crystal · JXS10P4

TAPING SPECIFICATION



REFLOW SOLDERING PROFILE



LOAD CAPACITANCE CODES

- 6 pF: q
- 7 pF: m
- 8 pF: k
- 9 pF: n
- 10 pF: h

example 32.0 MHz / 8 pF: 32k0